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SIX CASES OF SUCCESSFUL OPERATION, IN ONE FAMILY, ON CHILDREN BORN BLIND.

BY HENRY W. WILLIAMS, M.D., BOSTON.

[Communicated for the Boston Medical and Surgical Journal.]

In February, 1857, I visited a German family, residing near the southern boundary of this city, of which five members, the mother and four children, were affected with cataract in both eyes, evidently of congenital origin.

The mother was not aware of any cases among her eight brothers and sisters, or among her ancestors. In her, the lens exhibited in each eye a disseminated, dotted opacity, the cloudy spots being most numerous near the centre, while the margin of the lens was comparatively clear. Consequently, in a bright light she was almost entirely blind, but in a moderate light saw sufficiently well to perform, in a slovenly manner, the household duties of a laborer's wife. The capsule of the lens, in her eyes, and also in those of the children, was transparent. Her hair and irides were dark; the children had light hair and a grey or blue iris. She has two other children, whose eyes as yet exhibit no trace of cataract. The order of succession in the cases was as follows. The oldest girl had cataract; the second child, a girl, was free from the disease; the third and fourth children, a boy and girl, were affected; the fifth, a girl, was free; the sixth, a boy, was affected.

The eyes of the children presented nearly similar appearances, and one description may answer for the whole. Nearly the entire field of the pupil was occupied by opacities, consisting of dots of various sizes, and evidently occupying different planes of the lens. In a bright light, reflections from crystals of cholesterine could be plainly seen. All the patients had sufficient vision to enable them to find their way in a moderate light, when the pupil was so far expanded as to allow of vision through the margin of the lens; but in a bright sunlight they were nearly blind, and their sight was at no time sufficient to enable them to learn to read, or to gain a livelihood by ordinary pursuits.

Six operations were performed, on the afternoon of the 5th of

February; on the oldest girl, aged about 17, the boy about 12, and girl about 10 years. As I believed the entire lens might safely be at once broken up in these cases, the same method was pursued in operating on all the eyes, the lens and capsule being freely divided by means of a needle introduced through the sclerotica. Sparkling reflections from crystals of cholesterine were distinctly seen in the posterior chamber, by several physicians who were present. The eyes were covered with a dry compress and bandage, and the pupils were kept well dilated by the use of a solution of atropia. The oldest girl had very little pain or injection of the eyes, and no nausea. The boy had considerable pain in and around his left eye, and some nausea, continuing for two days. His right eye gave him no pain whatever. The youngest girl had considerable pain in the right eye, with intolerance of light, continuing four days. Her left eye gave her no pain at this time; but, the absorption of the lens going on slowly, a second operation was performed some months after, which caused some pain and nausea, but was followed by immediate absorption of the residue of the lenticular substance.

As the size and density of the fragments diminished, the absorption of the lenses went on more and more rapidly; but it was several months before the pupil became perfectly clear in all the six eyes. The children have now perfect vision, with the aid of the ordinary cataract glasses, and they will be able to follow any occupation they may prefer. The mother, and the child of two years, have not yet been operated on, the mother being timorous as regards her own eyes, even with the brilliant results before her obtained by the operations on her children, and wishing to have the little one left undisturbed till he is older. There is nothing in either of their cases less favorable than in those which have already been relieved.

I have seen another instance, in a family residing in this State, of no less than *seven* cases. Other children in the family were free from the disease. Some of the eyes had been operated on, but I think without much success, on account of portions of the capsule which were left behind and had become tough. These might, however, be readily removed by the small canula-forceps. Mr. Streatfeild also reports an example, in the third No. of the "Ophthalmic Hospital Reports," of six cases of double cataract, five children and their mother. Three other children exhibited no defect of vision. Two of this family had been operated on, with partial success. The cases now reported are interesting from the rare occurrence of such a group, and the still more rare performance of so many operations at one time in a single family; and the results are particularly gratifying, as they have given almost a new existence to those, who, but for the resources of our Art, must have been unfortunate and helpless during their whole lives.

Essex Street, September, 1858.

A CASE OF RETRO-RECTAL HÆMATOCELE.

[Read before the Boston Society for Medical Observation, September 6th, 1858, and communicated for the Boston Medical and Surgical Journal.]

BY CALVIN G. PAGE, M.D.

THE source of hæmorrhage in retro-uterine hæmatocele is not yet definitely settled. The prevailing opinion seems to be, that it is the result of the rupture of the Graffian vesicle between the ovary and peritoneum. In the case herein reported, I think we have reason to doubt whether the ovary were the source of the hæmorrhage.

I was called on the 21st of April, 1858, to see Mrs. M. J. D., aged 23. The patient is the mother of two children, but has not lived with her husband for some months. She is of dark complexion, and nervous temperament. Since her last child was weaned, the catamenia have been regular, but profuse and painful. Fourteen days ago, nearly two weeks after the last catamenia, she washed some clothes, using considerable exertion. After hanging them on the shed, in coming down the shed steps, she slipped, falling with her whole weight on the sacrum. She was able to get into the house, but experienced immediately strong, sharp, bearing down pains in the back, with nausea and faintness. The pains continued with moderate severity, very much aggravated by attempts at defæcation. The desire to evacuate the bowels was frequent, but very little was passed, and that was flattened like ribbon, and came away only with great pain and effort. Three days ago the catamenia made their appearance, aggravating the pain and producing great uneasiness.

I found the patient lying down, and writhing with pain; skin hot, tongue pretty clean, pulse full and slightly accelerated. She went up stairs with difficulty, and could walk with comfort only when stooping over. On examination by the vagina, I found the catamenia present, vagina hot, os uteri at normal distance, but slightly thrown forward. Behind the body and neck of the uterus was a moderately hard, circumscribed swelling, about as large as a hen's egg, ovoid in shape, and very tender to the touch. On examining by the rectum, I found the above characteristics more marked, and was enabled to make out more definitely the position of the tumor. It was behind the rectum, slightly to the right of that canal, and pushing it to the left. The rectum was so nearly closed by the pressure of the tumor that I could not pass my finger beyond the middle point of the tumor, at its greatest transverse diameter. The pain caused by pressure upon the rectum at that point was intense. The promontory of the sacrum could not be felt. Deep pressure upon the abdomen in the pubic region gave a feeling of soreness. The uterus could be felt through the abdomen indistinctly. An enema was ordered, and after its operation a suppository containing half a grain of morphine was directed to be placed in the rectum; the patient to remain in bed, and have liquid farinaceous diet.

April 22d. The enema ordered yesterday was given, but did not come away. The patient's mother waited an hour, then gave her the suppository. This began to relieve the pain in about half an hour. She was drowsy during the day, had very little pain, and slept well last night; is still somewhat under the effects of the morphine. Dr. Minot saw the patient with me to-day,—confirming the diagnosis.

23d. Patient still without pain, has not required another suppository; to keep quiet in bed. There is no change to report in the case, until the 26th. On that day the patient had a sudden desire to evacuate the bowels, and the mother reports a free alvine discharge, with blood and matter, giving great relief to the patient. On the 27th, I examined her by the vagina and the rectum, and found the tissues at the site of the tumor somewhat thickened, and the uterus in proper position.

The duration of the trouble, from the time of the accident to the spontaneous rupture of the swelling into the rectum, was twenty days. The interesting features of this case are, that the swelling was limited, and probably did not increase after its original formation. It discharged itself entirely at one effort, without operative interference, into the rectum. It did not occur at a catamenial period, but between the periods. It was retro-rectal as well as retro-uterine.

TRAUMATIC TETANUS—RECOVERY.

[Communicated for the Boston Medical and Surgical Journal.]

John Owen, colored, 32 years old, healthy, temperate and muscular; employed in a planing mill; was wounded in the right leg by the discharge of a cannon, with which some boys were playing, July 5th, A.M. It was charged with powder and a quantity of paper wadding; the latter lodged in the wound; the skin was slightly burned.

When he was seen, an hour after the accident, a wound, into which the forefinger passed for two thirds of its length, was found in the right leg, three inches below the head of the fibula, and one inch posterior to the line of the bone. Hæmorrhage had not been profuse, and had quite ceased. Within the wound, the fibula was felt through the muscle, but the wad could not be distinguished, and could not be seized with forceps. The attempt was not long persisted in, for fear of causing irritation greater than would result from the presence of the paper in such healthy flesh.

Water-dressing and simple diet were ordered; the pain was not great. This was on Monday, July 5th. He was told to send whenever he wished attendance. Getting no message, I visited him July 8th; he was very comfortable; the wad could not be detected. Is to continue previous treatment, and summon his physician when needed.

July 19th, Monday.—I called, no message having been sent in the meantime; the wad had come away on Saturday, and he was comfortable, with the exception of slight "twitching" in the wounded leg. The wad was described as a single, large cylindrical mass.

Wednesday, 21st.—I was summoned, and found him complaining of "twitchings" in the leg, and stiffness in the back and neck, but not of pain—in fact, he had well-marked though slight tetanic spasms, every four or five minutes. No distinct opisthotonos, but during the attacks, the head was thrown back, the abdomen slightly advanced, and its muscles tonically contracted. There was much vague apprehension in his aspect, though none was expressed in words. I took from the wound a large quantity of paper tightly rolled together. Dressing of water and laudanum—quietude enjoined. P.M.—The removal of the cause of irritation has not stopped the spasms, though they were a little less pronounced; but the jaws were fixed, the teeth not meeting by an interval barely sufficient to show an inch of the tongue, which had a thick white coat. I directed extract of hyoscyamus in doses of two grains, increasing till forty grains are taken in twenty-four hours, and to continue water and laudanum to the wound. No marked benefit.

22d.—Four visits. Extract of cannabis Indica given in place of the hyoscyamus—forty grains in twenty-four hours; liquefied hyoscyamus to the wound, which is looking well; the bowels were moved by calomel; defæcation aggravated the spasms. No better at night; beef-tea.

23d.—Three visits. Forty grains of the Indian hemp, as before; whiskey, one pint, to be taken at intervals through the day; beef-tea; some difficulty in swallowing.

24th.—Three visits. Condition the same; continue whiskey and beef-tea; in place of the hemp, one third of a grain of morphia every two hours till the spasms are controlled or sleep supervenes. Two and one third grains, in twenty-four hours, gave slight relief. Brandy in place of whiskey, which has grown distasteful.

25th, Sunday.—Four visits; has passed a better night than before, since the attack; continue morphia; a little sleep; less complaint of stiffness in back and neck, but no real check to the spasms; purged with calomel. Egg, milk and brandy in place of beef-tea, which has become distasteful.

During the next four days, three visits were made *per diem;* patient's condition the same; no ease but from morphia, and no real *exemption* while under its influence; stimulants and similar diet.

30th, Friday.—Two visits; somewhat easier.

31st.—Worse; more tendency to opisthotonos; sensation of "creeping down" of leg, i. e., forcible and involuntary extension, whereas it has hitherto been flexed at an obtuse angle. With assistance, I etherized him at night; two ounces were sufficient to

relax him completely, and he did recover from its influence for an hour. Although he thought he had been worse since ether, his abdominal muscles were not quite so severely contracted after this date; still the spasms went on as before. P.M.—About the same. Has had tincture of aconite applied to the spinal region and jaws, all the past week; he swallows rather better.

Aug. 1st, Sunday.—Patient about the same; is disgusted with liquors; wine was ordered instead, a pint and a half daily.

2d.—Much the same. For the last week he has taken two thirds of a grain of morphia night and morning, and one third at intervals during the day, as needed; from one and one third to two and two thirds grains per diem. Small doses of croton oil were given every two days to open the bowels. He gains a little power over the jaws, and it is curious that rum-punch has had more relaxing power than anything else exhibited, though the effect of henbane and hemp, dissolved slowly in the mouth, has been tested.

Since Aug. 3d, he has steadily gained, and has more control over the limb and jaw; has more appetite and sleep, is less dependent on opiates, though these are still necessary, and is more hopeful.

9th.—Is able to chew; for the last three days has had twenty-five drops of vinegar of opium with valerian, instead of morphia; no alcoholic stimulant. I was informed, for the first time, that the attack on account of which I was summoned, was the second, the first being on Sunday, 18th July, the day after the wadding first came away, and that he worked on the wound a long while, on Saturday, with two knitting needles, using them roughly as probes, which operation he repeated on Tuesday, 20th. In both cases tetanic spasms followed. I was also told that he had always been very nervous, subject to melancholy and fits of weeping. While under treatment, however, he showed much fortitude.

16th.—Very little spasmodic action, and that mainly confined to the leg proper. Learning that he has been taking opium, he refuses to continue to use it; for some days his bowels have needed no cathartic; sits on the bedside a good deal.

18th.—Walked a little.

20th.—First day, since July 21st, when it has not been necessary to visit him.

31st.—While walking, was suddenly "tripped up" by a spasm in the leg; he inadvertently placed the right foot more squarely and firmly on the floor than usual.

Sept. 6th.—I visit him now merely from interest. He has sat up all day for the last ten days, and walked his room cautiously; fatigue brings on slight spasmodic action in the leg; he cannot flex or extend the leg freely, but the stiffness is diminishing by the use of friction over the ham or muscles of the thigh; reports himself perfectly comfortable.

10th.—Gone to work.

This man had an intelligent and faithful nurse. His brain was

slightly affected by morphia, not at all by stimulants; yet there is no doubt that his habits had been strictly temperate.

Mild as this case was (never requiring what was kept as a last resort, the pushing of etherization), it showed plainly the advantage of stimulating and sustaining treatment, and the absence of anything like specific power in any drug employed.

Salem, Sept. 15th, 1858. F. WINSOR.

THE PROPRIETY OF THE USE OF THE SPECULUM.

[Communicated for the Boston Med. and Surg. Journal.]

MESSRS. EDITORS,—In a late number of your JOURNAL I noticed some remarks by Dr. Robert Lee on the use or rather abuse of the speculum, in the treatment of uterine diseases. Although no one supposes that the editors of a scientific journal necessarily endorse the opinions of the writers whose communications appear in their pages, I beg permission to make a few remarks on the statements of Dr. Lee, which seem to me to be hardly founded in common experience, and which may do harm by leading some to abandon a means of diagnosis and treatment, which, though unquestionably liable to abuse in the hands of ignorant or unprincipled practitioners, is of the greatest advantage when judiciously employed.

Dr. Lee states that, out of 300 patients, 47 were unmarried, and that several were young; that the greater number (I presume of these 47) were treated for hysteria, leucorrhœa, dysmenorrhœa, or some nervous affection of the uterus, without inflammation, ulceration, or any structural disease or displacement of the organ. He further adds, "On the ground of morality, and on every other ground, the employment of the speculum in these 47 cases could admit of no defence." Leaving aside the singular fact, that Dr. Lee himself employed the speculum in these very cases, (for how could he otherwise be certain that there was no inflammation, ulceration, or other structural disease?) I would remark, that 47 unsuccessful cases, out of 300 treated by means of the speculum, is an exceedingly small proportion. In fact, to cure or even relieve 253 out of 300 is the best proof of the great advantage of the method employed. I believe, however, that the experience of every practitioner who has had much to do with the treatment of uterine diseases will prove less fortunate than this: still, making every allowance for the inaccuracy of Dr. Lee's statements, I see no ground whatever for the inference he draws in his first paragraph.

Again, Dr. Lee says that 70 of the patients were barren, and that "the sterility was not removed, nor the hysteria, leucorrhœa, or disordered menstruation, under which the greater number were laboring, in a single instance relieved, or any benefit obtained." This statement, like the last, proves too much. What! not a

single case relieved out of a total of 70! The thing is incredible; it is simply opposed to the experience of every practitioner. I know that cases of barrenness depending on structural disease of the womb, are very hard to cure; and, doubtless, in many of these instances, the sterility depended upon other causes; but when we are called upon to believe, that in no case was hysteria, leucorrhœa or disordered menstruation relieved, I must refuse my assent to such a wholesale assertion.

The third paragraph contains the account of a case which is only remarkable on account of "a false prognosis," whereby delusive hopes were held out to the friends of the patient. What this has to do with the employment of the speculum, I am at a loss to understand. Has Dr. Lee, or any other physician, never made a false prognosis, or unintentionally held out delusive hopes?

Dr. Lee says, that he has never seen a case of simple ulceration from chronic inflammation of the os or cervix uteri, and he objects to the employment of the term ulceration to conditions of the mucous membrane when it is not destroyed by ulceration. This objection may be valid; but if Dr. Lee denies ever having seen morbid appearances in the cervix, which, for want of a better term, are commonly called ulceration, I must infer that he is either deficient in the power of observation, or that he is committed to a certain opinion to which he makes his facts conform. The latter is evidently the case. The morbid appearances of the os uteri are evident to every impartial observer, and their treatment is rendered possible, and often successful, by means of the speculum. Like everything else, it is liable to abuse; but the abuses of unprincipled or incompetent practitioners can never be corrected by sweeping denunciations which are not supported by facts.

T. S.

CASE OF ARREST OF DEVELOPMENT OF THE INTERNAL ORGANS OF GENERATION IN A FEMALE.

[Communicated for the Boston Medical and Surgical Journal.]

E. C., aged 20, was married at 16. Soon after marriage, her mother casually mentioned that her daughter had never been "regular," but that another daughter, married, and who has several children, did not menstruate until she was 20. She was told that matrimony would set matters aright.

The daughter, soon after marriage, complained of great soreness and inability to walk, and was laughed at, and the husband commended for a good lusty fellow. He left home in two weeks after marriage, and returned in two years, when the same complaint was made, and he deserted her a second time, to return again last spring. Then matters became worse than ever, and the parties came to blows, for which the husband was arrested and

confined. The mother then made a formal application to me, and was told that probably an operation would relieve the trouble, under the supposition that the case might be one of imperforate hymen, and that on the next day I would make an examination, and find out what the difficulty was.

The patient was inclined to plethora, had frequent severe headache, not periodical, and "bloated" a good deal. Had never had connection with her husband.

On examination, the mammæ were well developed. The external organs were normal in size and in appearance; pubes well covered with hair; the external labia of usual length. On separating the labia, the clitoris was normal in size and position. The orifice of the urethra was easily made out, immediately below which was a confused, unnatural state of the parts; and then, over what should have been the orifice of the vaginia, was a smooth, depressed mucous surface, extending to the fourchette. This surface bore evidence of having been pretty severely contused, and was very sensitive to the touch. On separating the external labia still wider, with the assistance of the mother, the confused appearance below the urethra was resolved into perfectly formed, but very minute nymphæ, which being carefully drawn apart, a minute vagina was discovered, with rugæ distinct, but very small, lined with a thin mucous secretion, and terminating in a cul-de-sac. The whole canal might hold a small white bean, and was the size of a child's at birth. The catheter was passed, and with the finger in the rectum an effort was made to discover the uterus. The end of the catheter could easily be felt in the bladder, and throughout the canal, but no trace of a uterus could be made out, either with the catheter or by careful and persevering manipulation over the pubes. There was no tenderness nor fulness there, or over the ovaries. Sexual appetite was described as "very good."

The parties were informed that the case was irremediable, and that the marriage was illegal. G. I. T.

RESEARCHES WITH REGARD TO THE DEVELOPMENT AND PROPAGATION OF THE TRICHOCEPHALUS OF MAN AND OF ASCARIS LUMBRICOIDES.

BY M. C. DAVAINE.

[Translated for the Boston Medical and Surgical Journal.]

As anything which throws light upon the history of human entozoa, about which so little has been known until lately, is of interest, I offer no apology for sending you the following translation from the proceedings of the *Académie des Sciences* of June 21st of the present year. The paper was accompanied by figures illustrating the various stages of development of the ova.

S. L. A.

1. The trichocephalus dispar is usually met with in the human cæcum. From my investigations, I have come to the opinion that at least every other person in Paris is affected with it. The development of this entozoön has not been heretofore observed, and its mode of transmission is entirely unknown. Since 1853, I have observed that the eggs of this entozoön are frequently evacuated with the stools. Often-repeated examinations of the ova obtained from the intestinal matters of dead bodies, or those which had been evacuated by the sick, authorize me to conclude, *that these ova are not developed in the human intestines, and that they are always expelled in the condition in which they are found at the moment of their deposition.* The knowledge of this fact led me to try to obtain the development of these eggs by placing them in water, but very often the experiment failed. During the latter part of September last, having obtained some intestinal matters which contained large numbers of the eggs of the trichocephalus, I subjected these matters to repeated washings for many successive days, until the water used had become perfectly limpid and inodorous. The liquid was removed from time to time, and the ova were examined under the microscope every week. A certain number became altered; others remained uninjured, but without offering any indication of development. At the beginning of the month of April last, that is, six months after the commencement of the experiment, the vitellus in some of the ova became a rounded mass and acquired a certain degree of consistence, as was proved by compressing it. Some days after, in many of the ova the vitellus became divided into two, and afterward into four, parts. The division followed the usual course, and, by the beginning of May, in a considerable number of them the vitellus had assumed a mulberry shape. From this time no change of consequence could be observed until June 12th, on which day I noticed in some of the eggs a well-formed embryo, recognizable by its movements. This embryo, which possessed, up to a certain point, the form of the adult, was gradually attenuated from behind forward; its length was about ten one hundredths of a millimetre (about one three hundredth of an inch). Thus the appearance of the embryo of the trichocephalus did not occur until after the eggs had remained in the water eight months and a half.

2. On the 8th of October, I collected some eggs of the ascaris lumbricoides by washing the intestinal matters of a child which had often passed many of these entozoa. These eggs were kept in pure water, and examined from time to time, like the preceding. During six months they showed no change. On the 14th of April last, I found many of these eggs divided in two, some of them in four parts; but the greater number showed no change. On the 30th of April they were all divided in various degrees; in some the vitellus presented the appearance of a small mammillated sphere; on the 5th of May it had become reniform, and on the 7th the

embryo was apparent. The embryo was cylindrical, with a caudal extremity abruptly terminating in a point; its length was about twenty-five hundredths of a millimetre (about one one-hundred-and-twentieth of an inch); the three tubercles which characterize the mouth of the ascaris could not be seen. From the 7th of May until June 21st, 1858, that is for six weeks, the embryos have remained living within the shell of the egg; not one has escaped spontaneously.

I have placed the eggs in the gastric juice of the rabbit and dog; but, notwithstanding they remained three or four days in this liquid, the envelope remained unaffected.

No one, within my knowledge, has heretofore traced the development of the egg of ascaris lumbricoides. M. Richter, as reported by M. Kuchenmeister, having placed in water the eggs of these entozoa, and having examined them for eleven months after, found that they each contained a living embryo, but he did not succeed in seeing them hatched.

The eggs of the ascaris lumbricoides, like those of the trichocephalus, are evacuated with the fæces, and never show, before they are evacuated, the least sign of development. In the month of October last, these eggs, kept for a fortnight at a temperature almost constantly of 30° centigrade, showed no sign of development. The same eggs, left in an apartment at a temperature never above 16°, had undergone division in the month of April following. Eggs collected in the month of January are undergoing division to-day, and do not yet show an embryo; finally, other eggs collected on the 1st of April do not show to-day, notwithstanding the recent severe heat, any sign of development. Temperature, therefore, has not a very noticeable effect on the development of the egg of ascaris lumbricoides, which must remain of necessity for a long time in a state of latent life.

From the above facts I feel warranted in concluding: 1st. That the eggs of the trichocephalus and the eggs of the ascaris lumbricoides are developed outside of the human body. 2d. That the appearance of the embryo does not take place under eight months, at least, for the one, and six months for the other.

During this long interval the eggs of the trichocephalus and the ascaris lumbricoides may, without doubt, be carried by rains into the brooks, rivers, and wells, the water of which is used for drink, or is employed in the preparation of food. These eggs, completely developed, or their embryos, may in this way reach the intestines of man, and there acquire a final and complete development.

ETHER—THE SUIT AGAINST DR. DAVIS.

[Communicated for the Boston Medical and Surgical Journal.]

Messrs. Editors,—I have read with some surprise the communication of W. E. C. on the subject of the ether suit, in your Jour.

NAL of the 16th inst. Such wholesale denunciation, without a reason rendered, of the two gentlemen referred to as principals in the suit, is surely without precedent in the late annals of our medical literature. What is there in the position of either Dr. Morton or Dr. Davis that calls for such a tirade? Has not any man who confers an inestimable boon on the community a claim in equity on that community for remuneration? And if so, does the mere fact that he is a member of the medical profession absolve the public from acknowledging the claim? It is a principle recognized by all enlightened governments in the patents and copyrights given to inventors and authors, in the grants to such benefactors as Jenner, in the honors and pensions granted to promotors of science generally, that whoever makes an important discovery calculated to advance the welfare, or lessen the burdens of our common humanity, should receive something in the shape of an equivalent, not only as a mark of gratitude for his own exertions, but to encourage others to persevere in the same course. Our government shows a disposition to repudiate this principle. Peculiar circumstances have made Dr. Morton its representative. He bears aloft the standard of hope to the men of genius who may hereafter spring up in our profession. Personally, I know nothing of the man. Of "his deadness to all moral sense," as asserted by the author of the communication in question, I am ignorant. But, "be he e'er so vile," this position, like St. Crispin's day at Agincourt, "gentles his condition." The debasing remark, whether true or false, is impertinent to the question at issue. Dr. Morton is simply maintaining his rights; and in doing this, he is fighting the battle for the rights of every individual member of the profession. And, instead of being accused of charlatanry, and want of sympathy with the profession, and for his fellow men, by persons who, were they placed in his situation, would be no more willing than he to sacrifice the prospect of an ample fortune to disinterested love of poor suffering humanity, the profession should make his cause their own, and rally round him as one man, causing their voice to be heard, not only in Congress, but throughout the length and breadth of the land; until the American government has freed itself from the charge of annexing the ether discovery to its dominions, and the medical faculty discharged as aiders and abettors of the iniquity.

One word as to the position of Dr. Davis in the premises. He is asked, "Why he is not doing, what he is doing, and what he means to do?" I suppose the doctor is eating and drinking, &c., as they did in "the days of Noe," and probably means to keep on so, if the words of your correspondent have not taken away his appetite. And while he is thus employed, let me say that there is a peculiar fitness in selecting an agent of that government, which, while it lavishes millions on demagogues and other unworthy objects, does not hesitate to appropriate without recompense, and

smuggle into its military store-shop, the products of the brain-labor of one of its humble citizens. The course is that which is best calculated to bring it to a realizing sense of the sin of its pilfering propensities, and perhaps may lead it, in common honesty, either to issue orders to its medical corps no longer to use ether in the hospitals, or to make the *amende honorable.*

B. H.

OPERATION FOR THE FORMATION OF A NEW NOSE.

BY GEO. BUCHANAN, A.M., M.D., SURGEON TO THE GLASGOW ROYAL INFIRMARY.

PLASTIC operations on the face are usually attended with more favorable results than those on any other part of the body. The large supply of blood from several vessels, the number of branches into which they subdivide, and the free inosculation of their ultimate ramuscles, render the union of cut edges in this situation, when properly adapted to each other, much more rapid and perfect than in parts endowed with a less degree of vitality. When large portions of the scalp or the integuments of the face are almost detached by accident, adhering by a very narrow isthmus, if carefully cleaned and replaced they rapidly form adhesions to the parts underneath, while under similar circumstances much smaller portions of skin in the extremities will slough away. A knowledge of this fact has led surgeons, from a very early period in the history of the art, to devise operative proceedings for supplying accidental deficiencies, or replacing structures removed by disease. Rhinoplasty is one of the recognized operations in surgery, yet the results are not always so encouraging as to induce surgeons to recommend it indiscriminately. When the nose has been extensively destroyed by ulceration, especially when the bones have been much implicated, and the whole organ has fallen down from the want of central support, the new nose will always shrink back on the face to a certain extent, and although the hideous aspect of the sufferer will be much improved by the covering of skin applied to the gaping chasm of the exposed nares, he should always be candidly informed of the extent of improvement he may expect, before he submits to the rather tedious process required, else he may be disappointed at the ultimate result. When the bones and skin of the bridge are in their natural condition, the surgeon may promise something more, however disfigured the extremity be, provided the diseased process has been completely arrested. I am induced to publish the following case, not that there is anything unusual in its progress, but because it has been attended with a very favorable issue; and a doubt was suggested, whether the man would not have been better with some artificial substitute. The operation has proved successful even beyond my expectations, and has vastly improved the personal appearance of the patient.

Thomas Aitken, aged 27, was admitted into the Royal Infirmary on the 14th December, 1858. When six years of age, he was affected with an ulceration of the nose, which continued to advance for several years. After the destructive process was arrested, an open sore remained for a long time, but it has been entirely healed for the last thirteen years. From his description, and the effects it has produced, it seems to have been lupus. The cicatrized surface is firm and elastic to the touch, and the skin in the vicinity is quite sound. The disease has evidently been arrested for many years, and the parts are in a very suitable condition to be made the subject of operative procedure. The man is very anxious to have a new nose formed, and has come from Yorkshire expressly to have the defect remedied.

The nose at present has the following appearance:—The cartilages of the alæ have been altogether removed by the diseased process, and the septum has been destroyed as far back as a line leading from the point of the nasal bone to the spine of the upper jaw. The whole framework of the nose in front of the bone is gone. The bone, however, has not been implicated, and the bridge and edges of the nares are felt in their natural condition. The openings of the nose are closed by the skin, which, having lost its ordinary support, has fallen down toward the centre. On the right side it has become attached to the remains of the septum, and has completely closed up the passage, with the exception of a point which barely admits a probe. On the left side the opening is about an eighth of an inch in diameter. The whole of this covering of the stump of the nose is thin, red, and shining, and is more of the character of cicatrix than stretched skin. On the upper lip are extensive cicatrices, indicating that it also had been implicated in the ulcerative process. The contraction of these scars has caused the whole lip to be protruded and everted, which adds much to the disagreeable aspect presented by the patient.

On the 16th December, I performed the operation in the following manner:—The patient having been laid on the table, and put under the influence of chloroform, an incision was made from the point of the nasal bone, along the outside of the left nostril, and a strip of the cicatrized edge about a quarter of an inch in breadth was removed. A corresponding incision was made on the opposite side, and continued up along the remains of the septum, which opened up the right nostril, and left a broad bleeding surface all round, in comparatively healthy tissue. I had previously sketched out on the brow a triangular flap, with a little tongue for a new septum. I now made an incision along the marked lines, carrying the knife down to the periosteum; and having dissected off the flap of the skin, left it attached by a broad neck between the eyebrows. All the cut edges and surfaces bled freely, but no vessel required ligature; and the application of lint dipped in cold water soon arrested the hæmorrhage. When the blood

ceased to flow, the parts were placed in proper position, by twisting the neck and bringing the edges of the flap in contact with the raw margins of the nostrils, and the little tongue to a raw point at the junction of the septum and the upper lip. The angles of the new alæ and the little tongue were fixed by the interrupted suture, and two stitches on each side kept the edges in good apposition. The wound in the forehead was brought together at the upper and lower points by a suture, and the whole covered with bits of wet lint.

On the second day, I removed the lint from the nose. The flap was somewhat swollen, of a reddish color, and quite warm. On the fourth day, the swelling was greater, especially at the neck of the flap; but adhesion had taken place at several points; the heat was good, and the patient had feeling in the transplanted skin. On the seventh day, a slight blush of erysipelas was perceptible on both cheeks, and as the needles were beginning to ulcerate out, all the twisted sutures were removed. Union had taken place at both angles and along the sides, except at the top, where the swelling of the twisted neck had somewhat separated the edges. The piece of lint which had been put in the wound in the brow was adhering firmly, and it was not till suppuration was established, a few days after, that it came away, leaving a granulating surface.

On the tenth day, all the sutures and dressing were removed, and the parts looked well; the erysipelas was gone, the heat of the nose good, and there was sensation in every part of it. The wound in the brow was large, but granulating well, and the swelling of the twisted part had now subsided. The little tongue had not adhered to the point to which it had been attached, but had applied itself to the inner raw surface of the point of the new nose, and was adhering there and keeping it in a proper position. Granulations were springing up freely from the inside of the flaps, and I thought it proper to introduce plugs made of pieces of elastic catheter, wrapt round with strips of lint, to support the organ during further granulation and cicatrization.

On the 23d of January, all the edges had perfectly united, and the granulating margins of the nostrils had cicatrized; the openings still tended to contract, but were kept in proper shape by the plugs; the wound in the forehead had much contracted, granulated up to the level of the neighboring skin, and was cicatrizing rapidly. The nose was of a good color, of natural temperature, and perfectly sensitive. It was firmly adherent, and could bear handling; so the patient managed the nostril plugs himself. I therefore completed the operation by dividing the twisted neck. A little artery spouted freely, which showed that the circulation had been very active in the transplanted skin. The neck of the flap was then pared to a wedge shape, and a corresponding triangle of skin removed from the bridge of the nose, where it had been

left entire in the first operation, under the twist. The surface and edges of the two raw surfaces were then adapted and retained in apposition by two sutures. In three days union had taken place, and the stitches were removed. In a week every point was cicatrized, and the nose complete.

20th February. The appearance of the new organ is now all that could be desired. The upper part has retracted upon the bridge, and the point is well supported by the little columna which has adhered to the inside, and is resting upon and attached to the remains of the cartilaginous septum. As usual in successful cases of this operation, the feature is of the form known as the hooked or Wellington nose; and as it has much improved the man's personal appearance, I have not thought it necessary to make a larger columna from the lip, which is often required; but this still remains available, if at any time he should wish it made more prominent.—*Glasgow Medical Journal.*

ARSENICAL POISONING—ARSENIC IN SUBNITRATE OF BISMUTH.

BY DR. ROBERT E. ROGERS, PROFESSOR OF CHEMISTRY IN THE UNIVERSITY OF PENNSYLVANIA.

Dr. Rogers called the attention of the College to a recent case of suspected poisoning with arsenic, the peculiar circumstances of which, as developed in the course of the legal investigation, rendered it unusually interesting in a medico-legal point of view.

The trial was suddenly cut short, and the accused party released, on account of an accidental impurity discovered by him (Dr. Rogers) in the medicine which had been administered by the attending physician of the deceased.

His object was not to discuss the evidence of poisoning in the case, although he had no doubt that, with all the facts elicited at the trial at his command, such a discussion would both be interesting and instructive; he wished to refer only to the point already alluded to as having terminated the prosecution; and, at the same time, to put the Fellows of the College on their guard against an accidental impurity of a common remedy, which had been hitherto unsuspected, viz., the presence of *arsenic acid in the subnitrate of bismuth.*

Dr. Rogers was unable, from his own knowledge, to detail the history of the case from the beginning. His connection with the investigation dated only from the time when the stomach and intestines were brought to him, carefully separated from other parts of the body, and for chemical analysis *alone.*

The examination was conducted exclusively for arsenic, since that substance was known to have been procured by the accused; while there were other circumstances tending to create the suspicion that it had been criminally administered.

The stomach and alimentary canal contained a very small amount of pulpy matter. This, taken from the stomach and then from successive portions of the bowels, was analyzed, and in each case exhibited the presence of arsenic.

The material of the stomach itself was next examined, and likewise found to contain arsenic. The bowels were then divided into five equal lengths, and each subjected to the proper tests, and with the same results.

The presence of the arsenic in all of these experiments was not only unmistakable, but very decided in amount. How much the patient had swallowed, even presuming that it had been given with intent to poison, it would have been impossible to determine by the most careful quantitive examination, since copious vomiting and purging had prevailed during several days, and up to a short period before death, so that the stomach and bowels were almost completely emptied of their previous contents.

The presence of the arsenic in the substance of the tissues examined, naturally induced the presumption that it existed in the liver, lungs, and other portions of the body of the deceased. He regretted that he had not had the opportunity to ascertain the fact, as nothing had been preserved and sent to him except the parts referred to, nor were these in a condition to enable him to recognize either the presence or absence of the physical signs of irritation or inflammation, such as might have been expected in a case of arsenical poisoning.

Hence, in the absence of any proof of an absolute amount of arsenic adequate to destroy life, the mere fact of the discovery of a poisonous adulteration of the medicine administered was considered sufficient to invalidate the evidence against the prisoner, and to justify her immediate acquittal.

During the early days of the trial, nothing occurred to indicate that arsenic had been administered as an adulterating substance of the medicine directed by the prescribing physician. At a later period, the court called for a copy of the prescriptions which had been ordered by the physician, and subnitrate of bismuth appearing as one of them, Dr. Rogers directed his efforts to determine how far that substance was pure.

He was unable to procure a specimen of the identical subnitrate which had been administered, not succeeding in finding the druggist who had sold it, but obtained a number of samples from individuals throughout the city, and prepared, many of them, by different manufacturers.

Of ten specimens, some of which were imported, which he examined, all were found to contain arsenic with the exception of two.

He did not experiment to ascertain the per centage, but inferred it to be small, too much so, he presumed, to have any material effect, except in long continued and unusually large doses. It

was not shown in this case, nor was it probable, that enough could have been taken in that way to produce the vomiting and purging, much less the fatal result. It was to be remembered also, that the symptoms attributed afterward to poisoning, had begun and continued for some time before the bismuth had been taken.

He then exhibited to the College the result of some of his analyses in the arsenical rings deposited within the tubes employed.

He remarked further, that the druggists applied to for specimens or samples did not appear to be aware of any liability to this kind of impurity in subnitrate of bismuth, a fact which rendered it still more desirable that the subject should be brought before the notice of the College—since the usual mode of preparing the subnitrate, unless great care was taken in washing the product, rather favored the presence of arsenic acid, unless the bismuth from which it is prepared be pure.—*Trans. Coll. Phys. of Philad., in Am. Journ. of Med. Sciences.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, SEPTEMBER 23, 1858.

MEDICAL INSTRUCTION.

Among the many examples of progress in the present age, the great improvement in the art of teaching is one of the most striking. It is not fifty years since the Latin language was taught in England by means of a grammar *written in Latin*. It seemed as if the object was to throw difficulties in the way of the learner, instead of making the path of knowledge plain before him. How different is the art of instruction at the present day. The pupil is treated like a rational being, instead of an unintelligent animal; learning is made attractive, instead of repulsive; and the business of education is generally a source of pleasure both to the teacher and pupil, instead of becoming a task to both. Medical education has not been behindhand in this march of improvement, and there is already a tendency toward curtailing the tedious system of lectures, and increasing the amount of clinical instruction. The advantages of lectures in teaching the different branches of medical science are inestimable. They present to the student in a condensed form a mass of information which lies scattered in many directions, and which his imperfect acquaintance with the subject would not enable him to collect together, even if he had the time to do so; but it is beginning to be conceded that too much time is spent by the weary student in listening to tedious lectures, upon which it is difficult to fix his attention, and which are with difficulty retained in the memory, to the exclusion of the more practical study of disease. In the language of Dr. R. B. Todd, "how unnecessary in the present state of medical literature are long courses of lectures on the practice of medicine and surgery, or, indeed, on any subject not requiring demonstration and experiment! How much better

would it be to confine the lectures on these subjects to the discussion of difficult, doubtful and important points of pathology and practice, preceded by a sufficient statement of first principles suitable for the uninitiated! And in such lectures, care should be taken to indicate the best sources of information, and the most valuable works of reference, and to encourage habits of research and study. * * * * * Much of the time now spent in listening to lectures (the greater part of which can be no more than what may be read at home), might be devoted to hospital work—and the pupil would acquire, by his own sight and touch and hearing, the knowledge which in the lecture-room he can receive only upon the description and authority of another.

We are glad to see that these views are approved by the Faculty of Medicine of Harvard University. In their annual announcement, lately issued, it is stated that "the duration of the winter course of lectures which is now announced has not been augmented," while the opportunities of making the student practically acquainted with disease have been increased. In the department of Clinical Medicine, besides the instruction at the bedside of the patient and the clinical lecture afterwards, by Dr. SHATTUCK, a separate course of instruction in auscultation and percussion will be given by Dr. BOWDITCH, and the students will be enabled to be present at the examination of the out-patients of the hospital, by Dr. ABBOT, the number of whom is large, and is daily increasing. Practical instruction in the use of the microscope is given by Dr. HOLMES. The class is also allowed to be present at the autopsies, which are conducted by Dr. ELLIS, Pathologist to the Hospital, whose ability in imparting knowledge is well known. In the departments of Surgery, Chemistry, Midwifery, and Materia Medica, similar facilities are offered to the student for acquiring a practical acquaintance with these branches of his profession. Conferences are also held at the Hospital, which such students may attend who feel disposed, at which medical subjects are discussed, demonstrations are given, and a more intimate relation established between the professors and the students than is often the case, which greatly facilitates the acquisition of knowledge to the latter. Many other advantages are offered to the student at this school. We have no room to detail them here, but refer to the announcement for particulars. We only remark, in closing, that it is the aim of the Faculty to impart practical knowledge, to enable the student to examine and study for himself the morbid conditions which it will be the business of his life to treat, and to make the course of instruction no less interesting than valuable.

PUBLIC HEALTH.

IT must be gratifying to every friend of humanity to know that the extent of the epidemic of cholera infantum, which has been prevailing among us for a few weeks past, has received a decided check, and that the mortality from dysentery is diminishing. How much the prevalence of disease has been connected with the nuisance to which we have already frequently alluded, in the west part of the city, we will not undertake to say. We feel confident of one thing, that to the unusual prevalence of east winds we owe it, that the sickness has not been much worse. We are glad to see, that by the progress made in filling up the flats, and in repairing sewers, there is a prospect of abatement of the stench which has annoyed us so long. Even

the Mount Vernon street drain, which has been long the source of a most disgusting odor, is now being properly repaired, and extended to the Commissioners' line.

NOTE FROM DR. DAVIS—REPLY TO W. E. C.

United States Marine Hospital, Chelsea, Sept. 18th, 1858.

MESSRS. EDITORS,—I was amazed to find in the JOURNAL of Thursday, Sept. 16th, which came to hand only this morning, a communication, signed W. E. C., containing charges of the gravest nature against my professional character, in connection with the suit brought against me in the Circuit Court of the United States, by W. T. G. Morton, for an alleged infringement of his patent for the use of ether as an anæsthetic. I was not before aware that I had been charged by a public print, or otherwise, with "disgraceful collusion," and I seize the first moment, after it is brought to my knowledge, to deny *in toto*, as utterly groundless and false, not only this charge, but the various insinuations and imputations so wantonly thrown out by W. E. C. If the writer of the communication, or any gentleman of the profession, will call upon me, I will show him, with pleasure, what I have done, "what I am doing, and what I mean to do"; and moreover satisfy him that, thus far, I have acted under the best legal and medical advice that I could command.

CHARLES A. DAVIS,
Physician and Superintendent.

DR. JAMES B. MCCAW, one of the editors of the *Virginia Medical Journal*, has been elected Prof. of Chemistry in the Medical College of Virginia, that chair having been vacated by the resignation of Prof. Martin P. Scott.

Health of Providence.—The city of Providence has been unusually healthy during the month of August, the mortality having been 55 below the average for twelve years. The total number of deaths was 95, of which 36 were from diseases of the bowels usually prevalent at this season. Of the 95 deaths, 64 were in subjects under 5 years of age, and of the 36 deaths from "summer complaints," all but one were under 5 years.

Health of the City.—There was a remarkable diminution in the mortality of Boston during the past week, 83 deaths having been recorded in place of 114 of the previous one, and of these 5 were from casualties, or violent causes. This difference is chiefly owing to the subsidence of cholera infantum, the number of deaths from which was diminished from 40 to 18. There were 6 deaths from dysentery, a reduction by 2 from the previous report. The number of deaths in subjects under 5 years of age was 44. The total number of deaths for the corresponding week of 1857 was 81, of which 24 were from cholera infantum, 6 from dysentery, and 9 from consumption.

MARRIED,—At Hartford, N. Y., August 9th, B. W. King, M.D., Professor of Physiology in the Fort Edward Institute, to Miss Eliza A. Palmer, of the former place.—At Anamasa, Iowa, Sept. 4th, Dr. Edwin Blakeslee to Miss Lizzie Scott.

Deaths in Boston for the week ending Saturday noon, September 18th, 83. Males, 41—Females, 42.—Accident, 2—apoplexy, 1—inflammation of the brain, 1—congestion of the brain, 1—cancer (breast, 1; kidneys, 1; uterus 1), 3—consumption, 14—convulsions, 2—cholera infantum, 18—cholera morbus, 2—croup, 2—diarrhœa, 1—dropsy in the head, 3—drowned, 1—dysentery, 6—infantile diseases, 3—puerperal, 1—fracture (of the leg and arm), 1—scarlet fever, 3—yellow fever, 1—gangrene, 1—disease of the heart, 2—hæmorrhage (uterine), 1—intemperance, 1—congestion of the lungs, 1—disease of the liver (cirrhosis), 1—marasmus, 1—suicide, 1—teething, 6—whooping cough, 2.

Under 5 years, 44—between 5 and 20 years, 3—between 20 and 40 years, 18—between 40 and 60 years, 13—above 60 years, 5. Born in the United States, 63—Ireland, 15—other places, 5.